UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Electricity Market Design and Structure) Docket No. RM01-12-000

COMMENTS OF THE PUBLIC POWER COUNCIL
RELATED TO MARKET DESIGN AND RTO FORMATION

The Federal Energy Regulatory Commission (Commission) under the above-captioned Docket is addressing the establishment of Regional Transmission Organizations ("RTOs") to promote the development of wholesale electric markets. The Commission issued its Notice of Workshops on September 28, 2001, which were conducted the week of October 15 through October 19, 2001 (referred to as "RTO Week") at the Commission's offices in Washington, D.C. At the conclusion of RTO Week, the Commission solicited comments from interested parties. In the Order Providing Guidance on Continued Processing of RTO Filings issued November 7, 2001, the Commission requested further input on the RTO process in order to allow for the most developed record possible.

The Public Power Council (PPC) represents the interests of Bonneville Power Administration's (BPA) consumer-owned utility customers in seven western states – Washington, Oregon and Idaho, and parts of Montana, Nevada, Utah and Wyoming. Pursuant to federal enactment, PPC's more than 100 member utilities have preference rights to federal power and purchase most of their power from BPA. BPA owns and operates three-fourths of the Northwest's transmission grid that delivers the power to the bulk of our members. Where it does not own or operate the transmission facilities to

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deliver the power, BPA contracts for transmission service from RTO West "Filing Utilities" under general transfer agreements. PPC has actively engaged in the regional process to develop RTO West. PPC offers the following comments at the request of the Commission at the conclusion of RTO Week and in the Commission's Order issued November 7, 2001.

INTRODUCTION

The workshops held during RTO Week addressed the issues of necessary market information; congestion management; cost recovery; market monitoring; transmission planning; business and reliability standards; the nature of transmission rights; federal/state cooperation; and related matters. With the workshops, the Commission initiated the process of developing rulemaking to design a pro forma tariff to apply to all public utilities and RTOs to implement market design and structure. At the conclusion of RTO Week, the Commission requested comments from the interested public related to the issues discussed by panelists during the week.

On November 7, 2001, in this Docket, the Commission issued its Order slowing down the RTO process to an "*expeditious*, yet *carefully deliberated*, way to complete the development of RTOs, taking into account the need for further industry and state comments."

PPC believes that the Commission's decision to take a careful, measured look at RTOs is prudent and justified by the untested nature of the proposed structures. An RTO may not provide significant benefits to the Northwest because many of those benefits are already captured by the BPA's operation of the transmission system. Nevertheless, if an RTO were established in the Northwest, its structure and pricing must take into account

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the dominance of hydroelectric generation and the necessity for cooperative operation of hydroelectric generation in the region. PPC does not support a west-wide RTO.

COMMENTS

1. *There must be adequate flexibility in RTO design and the RTO's pricing model to reflect regional differences.* A single, mandated RTO design would not adequately reflect some significant differences in the nature of transmission systems across the United States. In particular, the Western Interconnection is significantly different from the transmission grid in the eastern United States, and the Pacific Northwest is significantly different from the rest of the Western Interconnection. The Western Interconnection is a relatively sparse transmission grid connecting widely separated urban areas and generation, where power is frequently wheeled much greater distances than occurs on the Eastern Interconnection. Most of the power in the Pacific Northwest comes from the hydroelectric system. These circumstances are important in considering some of the recommendations made at the conference.

One example of a proposal that is not workable in the Northwest is locational marginal pricing (LMP). The Commission staff's summary of the conference declared that "the minimum requirements for congestion management should be LMP plus additional financial instruments for hedging" and noted that one panelist concluded that conditions in the west meant that LMP should not be required there. There are seldom alternate paths between a generator and a load center, and many transmission paths in the Northwest are frequently constrained. Thus, the widely spaced, yet often constrained, nature of the transmission grid tends to maximize generator locational market power. (One of the key functions that BPA performed, without charge, before BPA's generation

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and power functions were separated, was to manage generation on BPA's geographically diverse hydroelectric system to minimize constraints on the transmission system.) Use of an unmodified LMP congestion management approach in the Pacific Northwest would provide significant locational monopoly rents to some existing generation to a much greater extent than will occur on the Eastern Interconnection, which has a much denser transmission network.

Another key difference between the Northwest and the rest of the country, as noted by BPA's panelist during RTO Week, is that the Northwest hydroelectric system has other purposes in addition to generating power, including protection of fish, other species and habitat. In addition, the nature of an integrated hydroelectric system means that electricity is not generated at the same locations from hour-to-hour or day-to-day. The substantial nonpower responsibilities of the Northwest hydroelectric system mean that hydrogenerators cannot simply be turned on and off in response to price signals. The National Marine Fisheries Service mandates various river flow regimes for purposes of implementing the Endangered Species Act such that hydroelectric facilities frequently cannot operate above a certain target level, while at other times they must generate power at a certain level to minimize water spilling over the dam.

With a significant portion of Northwest generation governed by both power and nonpower constraints, LMP price signals in the Northwest, therefore, would likely show severe oscillation with consequent disruption to markets and electrical users. Only a minority of generation located in more densely populated areas in the Northwest could potentially respond to LMP price signals. The Northwest is also interconnected with other regions on lines that are frequently constrained. Generation available outside the

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region at a lower price would not beneficially affect price oscillation during periods when the Northwest system is constrained.

Moreover, the coordinated Northwest hydroelectric system, in order to maximize the output of the entire system, shifts generation around from dam to dam on an hourly basis. These dams are located at considerable distances from each other. Using a system that is tied to setting prices at particular busbars will cause significant oscillations in prices at those busbars as the location of hydroelectric generation shifts from point to point.

These challenges to implementing LMP in the Northwest are examples that illustrate the need for considerable flexibility in crafting RTO solutions for each area of the United States. A solution for those parts of the country with dense population centers within close proximity, with more generating sources, and with adequate transmission facilities will not work in the Northwest.

2. *Cost-benefit analyses are very important and must reflect regional conditions*. In its November 7 Order, the Commission set forth its plans to undertake cost-benefit studies to "demonstrate whether, and if so, how RTOs will yield customer savings" (Order, November, 2001, slip op. at 6). PPC agrees with and is encouraged by the Commission's decision to undertake these studies. The results will vary from region to region, and attention must be paid to local factors in order to produce a valid analysis.

Panelists at RTO Week addressed the importance of a good cost-benefit analysis. A thorough analysis looks not only at the global effects of establishing an RTO, but also at the specific impacts on individual transmission customers. It is important to determine

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whether an RTO makes sense for a particular area. A proper cost-benefit analysis can serve a useful role in evaluating and improving the design of any proposed RTO.

We were impressed by the comments of Roy Thilly, President and CEO of Wisconsin Public Power, Inc., who discussed with clarity the problems Wisconsin Public Power had accessing the market. He described why he thought that the establishment of an RTO in the Upper Midwest would help ameliorate those problems. Mr. Thilly's presentation was fact-specific – he explained the particular situation that public power had in Wisconsin, and specifically how an RTO would change that situation.

The specific facts governing the desirability of an RTO are very different elsewhere, and each region must be examined with particularity to its own needs. In the Pacific Northwest, where BPA has served as a competent *de facto* RTO for three-fourths of the transmission system, the hurdle that a proposed RTO faces, in order to demonstrate that it is beneficial, is higher than it is elsewhere in the country.

It is also important to look at individual customer impacts in doing a cost-benefit analysis, including a look at potential cost shifts among transmission customers. The magnitude of the cost shifts is important. If the benefits provided by the RTO are modest, and the level of cost shifts is large, it is questionable whether the harm inflicted on a set of transmission customers is worth the modest overall gains. More important, the design of the RTO can increase or decrease the level of cost shifts. Including the impact of cost shifts in the cost-benefit analysis can serve as a check on RTO design.

The RTO West Filing Utilities have increasingly relied on closed-door meetings to develop the specifics of the RTO West proposal. Given a natural inclination to advantage those entities allowed to participate in the meetings, it is important to curb that

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tendency by having a subsequent accurate accounting of who benefits, and who is harmed, by the final proposal.

3. *Existing contract rights must be preserved in the RTO structure*. A number of the panelists suggested that all existing physical contract rights to use the system should be extinguished and replaced by financial rights, which should be auctioned off in their entirety, with the revenues flowing back to existing transmission rights holders. Panelists argued that this approach would keep existing transmission rights holders whole, because they would receive auction revenues that would be expected to be sufficient to cover future transmission costs.

This analysis is incorrect in that it fails to consider that the risk of volatility in congestion management costs would be transferred to current holders of transmission contracts. Theoretically, even if transmission rights holders would receive enough money on an expected basis to cover future congestion management costs, current transmission customers would be exposed to catastrophically high costs if congestion management costs turned out to be very high. Consumer-owned utilities in the Northwest have learned at considerable cost what power price volatility can do to them and are not eager to repeat the experience in transmission. Because any congestion management scheme will necessarily be new and untested, hedging against transmission market volatility is likely to be complex and expensive. If the congestion management scheme turns out to be poorly designed or subject to gaming, that will only add to the problems created by volatility. Existing transmission customers should not be asked to bear these risks.

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The Commission should not use RTO formation as a mechanism for overturning existing transmission contracts. Even if existing transmission customers receive RTO financial rights (as opposed merely to the revenues from auctioning off those rights), existing transmission customers will be at risk from a congestion management design that is flawed. Current transmission customers should retain the option of being served under their existing contracts.

4. *RTOs should not be for-profit transcos*. Having for-profit transcos run the transmission system is unacceptable. Professor Paul Joskow noted during RTO Week that RTOs are completely new structures (there are no equivalents to the RTOs in the natural gas industry or in other deregulated industries) and that RTOs will therefore provide novel challenges to regulators. A for-profit transco would have great incentive to exploit the potential ways that congestion management, transmission investment, and other aspects of the RTO might be gamed.

Under traditional rate of return ratemaking, a transco would earn profits based on transmission investment. For-profit transcos would have an incentive to favor solutions that encourage additional transmission investment, even if investment in demand-side management, distributed generation or central station generation would be more cost-effective to relieve congested paths. "Incentive ratemaking" could allow the transco additional ways of earning profits, creating means of gaming the system through manipulation of path congestion and other aspects of system operation that regulators could not have foreseen when they promulgated a set of market rules.

The fact that BPA has done a highly competent job managing most of the transmission system in the Pacific Northwest proves that non-profit organizations can

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provide good transmission service. This does not mean that a nonprofit RTO could provide service quality equivalent to BPA's, but requiring an RTO to have a nonprofit business organization will avoid a host of problems that would be created by turning the Northwest's transmission system over to a transco.

5. *There should not be a west-wide RTO.* PPC appreciates Commissioner Wood's comments during RTO Week that there should not be a single RTO in the west. It is also encouraging that the full Commission in its November 7 Order indicated that multiple RTOs in the west would be acceptable (Order, Nov. 7, slip op. at 5). The sheer size of the Western Interconnection and the diverse nature of the west would render a single RTO fundamentally unworkable. We oppose the idea that a Northwest RTO should merge with the RTO being formed in the Desert Southwest. Even when the entity was the nonprofit Desert STAR, the size of the combined region and the underlying differences between the Pacific Northwest and the Desert Southwest made a merger of the two RTOs undesirable. Now that Desert STAR is being replaced by a for-profit transco, a merger of the two areas is even more objectionable.

6. *Any RTO formation must avoid subsidizing distant generation at the expense of everything else*. A couple of RTO Week panelists noted one potential problem with some RTO pricing proposals. The desire to establish a seamless national market should not be allowed to obscure legitimate cost differences between serving generation located close to load centers and generation distant from load centers.

The differences between close and distant generation sources are particularly obvious in the Northwest. Some of our utilities have chosen to rely on minemouth coal plants hundreds of miles from load centers, thus incurring additional transmission

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expense as an offset to the low cost of minemouth coal plants. Other utilities, however, chose to develop resources closer to load centers. Allowing the utilities that chose to develop distant generation to transfer their transmission costs to other RTO participants that do not burden the transmission system to the same extent would disadvantage demand side management, distributed generation and other forms of generation closer to load centers and exacerbate cost shifts caused by the RTO. Furthermore, if new minemouth coal plants incur the full incremental transmission costs of serving them, while existing minemouth coal plants get to spread their transmission costs over all RTO participants, that will give significant market power to existing minemouth coal plants.

One way to solve the problem of assessing transmission costs based on the distance from load centers is through the use of "license plate" or "company" rates. Establishing rates for existing transmission investment based on what parties are currently paying for that investment would preserve the consequences of resource acquisition decisions that entities made in the past and would minimize cost-shifts .

7. *It is essential to determine losses correctly to avoid subsidizing distant generation*. Failing to determine transmission losses correctly may result in subsidies to distant generation. The physics of an electrical transmission system are such that distant generation imposes much greater electrical losses on the system than does generation that is located close to load centers. To have a single uniform loss factor over the entire RTO area or much of the RTO area will send incorrect signals as to where generation should be located and will exacerbate the cost-shift problem.

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CONCLUSION

PPC is pleased with the Commission's decision to approach the formation of RTOs with deliberation, acknowledging the regional differences in the United States. In particular, we appreciate the Commission's recognition of the need for cost-benefit analyses to demonstrate whether and, if so, how RTOs will benefit customers and to provide a quantitative basis for the appropriate number of RTOs. The Commission has committed to making its determinations of RTO formations throughout the country based on the most developed record possible. In so doing, the Commission will demonstrate its commitment to a thorough examination of the regional differences and the costs and benefits to each region in determining the appropriate RTO structures for each region.

We thank the Commission for its willingness to consider the opinions of those of us affected by the formation of RTOs.

Dated this 13th day of November, 2001.

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I hereby certify that I have served the foregoing COMMENTS OF THE PUBLIC POWER COUNCIL RELATED TO MARKET DESIGN AND RTO FORMATION by First Class U.S. Mail, postage prepaid to all parties on the service list in Docket No. RM01-12-000 before the Federal Energy Regulatory Commission.

Dated this 13th day of November, 2001.

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